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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

VU, NGOC K

ART UNIT PAPER NUMBER

2611

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/595,624

Applicant(s)

OZ ET AL.

Examiner

Ngoc K. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 and 27-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 27-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's arguments filed 6/23/05 have been fully considered but they are not persuasive.

Applicant asserts that Smyth fails to disclose or suggest each and every element of claims 8 and 32. This argument is not persuasive. In fact, applicant does not specifically address or interpret in remarks for each and every limitation of each of claims above to indicate how the limitations of each claims above overcome teaching of Smyth. The teaching of Smyth meets each limitation of claims 8-11, 15-19, 32 and 33 that were interpreted in the previous action as well as in this Office action.

Applicant further argues "Smyth fails to disclose or suggest 'a selected media transport channel' or 'establishing a data session'". In response, Smyth teaches establishing connection for providing communications between STB 116 and Session Control Manager 200 through CCM 118. Specifically, a particular STB 116 communicates via a reverse or upstream channel to the Session Control Manager 200 for transmitting data or request. It is noted that there are typically 16 reverse or upstream channels supported by each Session Control Manager 200. As addressed in the previous action, Smyth teaches that the STB 116 is connected to a given CCM 118 must contend for the upstream channel that is available for propagating control signal from the STB to the Session Control Manager 200 via CCM 118. It is further noted that transport network 132 is analyzed to locate the least noisy portion of the available spectrum. Particularly, STB is then set to transmit and receive on a selected frequency having the least noise. (See 0020, 0035-0038). From these views, the system of Smyth not only provides transmitting and receiving data on a selected frequency having the least noise, but also provides establishing request from a STB 116 to Session Control Manager 200 via an assigned upstream channel

from 16 upstream channels. That is, Smyth teaches establishing a data session (request) over a selected media transport channel (a selected upstream channel).

Next, applicant argues that Smyth does not disclose or suggest “receiving downstream data session requests to a selected broadband network destination” with respect to claim 32 (Emphasis added). This argument is not persuasive. Applicant does not point out how the recited limitation “data session requests” is distinct from “requests” for service or program from STB to Session Control Manager in the Smyth’s system. Furthermore, Smyth teaches the Session Control Manager 200 receives one or more requests from a STB 116. The requests include requesting for a program requiring a high/low information channel resource level. It is further noted that the Session Control Manager 200 is responsible for service selection and control. Commands and requests from STB is processed by the Session Control Manager 200 and appropriate requests are made to a server to perform certain information navigation and movie-on-demand functions (see 0034). That is, Smyth teaches receiving downstream data session requests (i.e., requests for service or programming) to a selected broadband network destination (i.e., server).

2. Applicant's arguments with respect to claims 1-7 and 27-31 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8-11, 15-19, 32 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Smyth et al. (US 20020007492 A1).

Regarding claim 8, Smyth discloses a method for transmitting data packets (data streams formatted into transport packets) over media transport channels, to a remote unit (STB), said remote unit being associated with a destination address embedded in said data packets (STB being associated with a destination address), the method comprising the steps of:

establishing a data session over a selected media transport channel (STBs 116 which are connected to a given CCM 118 must contend for the upstream channel that is available for propagating control signals from the STBs 116 to the CCM 118 and manager 200 – see page 4, 0035);

allocating logical media resources over said media transport channel for said data session (the system 100 is capable of dynamically allocating information channel resources to the subscribers via their respective STBs 116 – see page 6, 0052);

converting said data packets to data transport packets embedding said allocated logical media resources, according to a media transport specification (each of the data streams is modulated onto a carrier signal and the signal is upconverted to a transmission frequency that complies with CATV spectrum – see page 2, 0019. Transport processing module (TPM) 110 adds ID information to the video and audio content provided by the server 108 such as program specific information (PSI) and packet identification numbers (PIDs) - see page 4, 0041); and,

transmitting said media transport packets via said selected at least one media transport channel (see page 2, 0019; page 3, 0026).

Regarding claims 9, 16 and 18, Smyth discloses that a transport processing module (TPM) 110 adds ID information to the video and audio content provided by the server 108 such

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as program specific information (PSI) and packet identification numbers (PIDs) (see page 4, 0041).

Regarding claim **10**, Smyth discloses transmitting a media program to STB, as media transport packets according to said media transport specification, via said selected channel, said data transport packet and said media transport packets sharing a single transport program number (see page 6, 0052; page 4, 0041).

Regarding claim **11**, Smyth discloses producing and presenting the multimedia programming, video, and/or graphics (see page 2, 0015).

Regarding claims **15 and 17**, Smyth discloses that a subscriber requesting a program requiring a high information channel resource channel will be allocated an additional sub-rate channel or a super rate channel. A subscriber requesting a program requiring a low information channel resource channel will be allocated fewer (or only one) sub-rate channels (see page 6, 0052).

Regarding claim **19**, Smyth discloses that the downstream channels are in-band channels (via path 134) and the upstream channel is an out-of-band channel (via path 136) (see figure 1 and page 2; 0019-0020).

Regarding claim **32**, Smyth discloses session manager and IP software switch (session control manager 200 and network interface 150), connected to a broadband multimedia router (within 112), receiving downstream data session requests to a selected broadband network destination (receiving a request from STB to a broadband network destination), wherein said session manager and IP soft switch (session control manager 200 and network interface 150) allocates network resources for said data session for transmitting over said broadband network destination (see page 6, 0052; page 5, 0043; page 2; 0018, 0020 and figure 1).

Regarding claim **33**, Smyth discloses that a subscriber requesting a program requiring a high information channel resource channel will be allocated an additional sub-rate channel or a super rate channel. A subscriber requesting a program requiring a low information channel resource channel will be allocated fewer (or only one) sub-rate channels (see page 6, 0052).

5. Claims 27 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoarty et al. (US 6,305,020 B1).

Regarding claim **27**, Hoarty discloses broadband multimedia system (figure 1) comprising:

a communication bus (communication link within headend 10);

a broadband multimedia router (112 & 121), connected to said communication bus (communication link within headend), to a data router (122) and further between a plurality of media sources (111) and a plurality of network transmitters (within distribution plant 14); and

a session manager (113), connected to communication bus (communication link within headend),

said session manager (113) providing routing instructions to said multimedia router (112 & 121), for directing media received from said media sources (111) to said network transmitters for transmitting over a broadband network (i.e., cable network) and for directing data received from said data router (122) to at least a selected one of the said network transmitters for transmitting over said broadband network to a specific destination (particular home) (see figure 1; col. 5, line 44 to col. 6, line 32).

Regarding claim **28**, Hoarty discloses that session manager (113) receives data session request (request for program and/or service), authorizes said data sessions and allocates network resources for said data session (see col. 8, lines 28-31 and 54-62; col. 9, lines 38-47).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyth et al. (US 20020007492 A1) in view of Bauminger et al. (US 6681393 B1).

Regarding claims **12-14**, Smyth does not explicitly disclose at least partially overlaying at least one the data image over at least one media image. However, Bauminger discloses partially overlaying a picture on a display screen or partially overlaying a display message on the broadcast picture (see col. 4, lines 38-44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Smyth by partially overlaying display message over broadcast picture as taught by Bauminger to present images concurrently for viewing on screen.

8. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hraster et al. (U.S. 6,324,267 B1) in view of Brown et al. (US 6,732,179 B1).

Regarding claim 1, Hraster discloses a method for transmitting data over a broadband networks having a plurality of downstream channels and an upstream channel, the method comprising the steps of:

receiving an upstream data packet from an user unit (packet from host 108), via said upstream channel (via upstream telephone path); directing said upstream data packet to an addressable destination, designated in said upstream data packet (packet from host 108 which is intended for a destination in Internet 150 go to modem 106, which routes the packet via



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telephone line 131 and PSTN 109 to a telephone modem 110. The modem 110 routes the packet to router 101, which routes the packet to Internet 150 - see col. 4, lines 42-49);

receiving a downstream data packet from said addressable destination; converting said downstream data packet for conveying in a selected one of said downstream channels, thereby producing transport packets (packet from Internet 150 is received in CATV headend 122, is put in the proper form for transmitting over cable 132 to host 108 via modem 106 – see col. 4, lines 35-40);

directing said transport packets to the user unit, via said selected downstream channel (the modem 106 reads the IP address of host 108 from the packet and routes the packet to host 108 – see col. 4, lines 40-42).

Hraster does not explicitly teach that the host includes a digital set top box. However, Brown teaches that client 112 is a set top box coupled to digital TV 110. Alternatively, the client 112 may be coupled to a computer system instead of a TV 110. The client 112 can also be integrated into the TV or computer system (see figure 1; col. 3, lines 55-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hraster by integrating set top box into TV or computer system as taught by Brown in order to enhance computer system for providing TV and data communication services to user.

Regarding claim 2, Hraster discloses that the step of converting is performed according to a plurality of predetermined network resources (when the data packet from the Internet is to go the host 108, it is routed to manager 102, which puts the packet into the proper form for transport by the relevant link-level network – see col. 4, lines 35-40 and col. 5, lines 8-16).

Regarding claims 3-5, Hraster discloses allocating network resources according to resource allocation request so that the modem 106 can receive high data rate transmission over

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cable plant. Control and management component 111 compares the serial number with a stored database of authorized serial numbers. Upon a match, the second tier of the authorization and authentication process is completed and appropriate system resources are allocated for modem 106 (see col. 3, lines 36-42; col. 10, lines 32-40).

Regarding claim 6, Hraster discloses the step of controlling the transmission rate of transport packets, via said selected downstream channel (receiving high data rate transmission over cable plant – see col. 10, lines 34-36).

Regarding claim 7, Hraster discloses that downstream channels are in-band channels (cable 132) and where said upstream channel is an out-of-band channel (telephone line 131) (see figure 1 and col. 4, lines 35-47).

9. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoarty et al. (US 6,305,020 B1) in view of Brodigan (US 6,530,086 B1).

Regarding claims 29-31, Hoarty discloses that the system manager performs call set-up which is the process of causing the assignment of a television information signal path to home 114b having a digital STB for interactive services (see col. 8, lines 54-59 and figure 1). Hoarty does not explicitly teach the system manger assigns a lay three address to the set top box. However, Brodigan teaches sending an IP address of a programming host computer that is assigned to a specific program channel and time associated to a STB (see col. 5, lines 17-22; col. 6, lines 7-14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Hoarty by sending an IP address of a programming host computer that is assigned to a specific program channel and time associated to a STB as taught by Brodigan in order to allow real time response from user to an external service provider via communication network.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ngoc K. Vu  
Primary Examiner  
Art Unit 2611

August 30, 2005